

## CONTINUOUSLY VARIABLE TRANSMISSION FLUID AND METHOD OF MAKING SAME

### ABSTRACT OF THE DISCLOSURE

5           A continuously variable transmission fluid comprises a hydrogenated cyclic dimer of  $\alpha$ -alkyl styrene and a low temperature viscosity control agent. The fluid does not contain more than 20 wt.% of a linear dimer of the  $\alpha$ -alkyl styrene, and the fluid has a kinematic viscosity of greater than about  $2.5 \times 10^{-6}$  m<sup>2</sup>/s at 100 °C, as measured according to ASTM D-445. The dimerized  $\alpha$ -alkyl styrene can be made by (a) contacting an  $\alpha$ -alkyl styrene with a supported acid catalyst to  
10 effect oligomerization of the  $\alpha$ -alkyl styrene to a cyclic dimer; and (b) hydrogenating the cyclic dimer in the presence of a hydrogenation catalyst to produce a fully hydrogenated cyclic dimer, wherein the  $\alpha$ -alkyl styrene is contacted with the supported acid catalyst in the absence of a solvent for the  $\alpha$ -alkyl styrene and a free acid.